

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Phillips Plastics Medford

Northwest Wisconsin Manufacturing Outreach Center

Value Stream Mapping Brings Positive Changes

Client Profile:

Phillips Plastics produces injection molded components for the auto and electronic industries. Approximately 300 people work at the Medford, Wisconsin, facility.

Situation:

Phillips Plastics was faced with high levels of work in process. This consumed floor space that could be used for expanding their business and also created additional non-value-added handling steps throughout the process. Phillips Plastics contacted the Northwest Wisconsin Manufacturing Outreach Center (NWMOC), a NIST MEP network affiliate, for help.

Solution:

NWMOC and Phillips Plastics worked together on developing an improvement plan. An initial group of 20 people from the shop floor and office was trained in the Principles of Lean Manufacturing, then a smaller group of eight was assembled from this large group of 20. This team was trained in Value Stream Mapping skills and developed a current state map of one product family. They then applied the lean and value stream mapping principles and created a future state map and an action item list that would get them to the future state condition. Focused training for a specific technical process was brought in from Northcentral Technical College, a partner of NWMOC. Machines were moved, quality at the source was made easier, and material handling steps were eliminated. Kanban material flow controls were put in place. The Value Stream Mapping team also recommended that everyone involved in this product family attend the Principles of Lean Manufacturing training. The plant management agreed, and everyone was then able to understand the business need and the action items being implemented. With everyone able to "speak the language of continuous improvement," plans progressed smoothly and several key people from the shop floor naturally assumed leadership positions in this process. One machine operator came to a team meeting with a plant layout she created on her kitchen table the night before. So far, over half of that plan has been implemented. Two material handlers designed and implemented several parts of the Kanban system and product cart reduction project.

Results:

- * Improved productivity by \$205,000.
- * Reduced work in process inventory by 75 percent.
- * Freed up additional floor space.
- * Introduced new product line resulting in \$3 million in sales.
- * Provided employees with advanced training and certification to a higher level.
- * Reduced employee stress significantly.

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* Reduced travel by 1.6 miles per day resulting in saving of \$6,500.

Testimonial:

"I especially liked the way the team meshed and everyone worked together to really make things happen -- the quality people, office, operators, management, and everyone."

John Brost, Production Manager